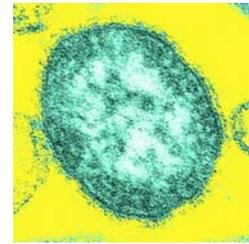


Measles

Disease

Measles is a respiratory disease caused by a virus of the same name. The disease is also called rubeola. Measles virus normally grows in the cells that line the back of the throat and lungs. **There is a vaccine for measles that is very effective in preventing infection.**



A typical case of measles begins with mild to moderate fever, cough, runny nose, red eyes, and sore throat. Two or three days after symptoms begin, tiny white spots (Koplik's spots) may appear inside the mouth. Three to five days after the start of symptoms, a red or reddish-brown rash appears. The rash usually begins on a person's face at the hairline and spreads downward to the neck, trunk, arms, legs, and feet. When the rash appears, a person's fever may spike to more than 104 degrees Fahrenheit. After a few days, the fever subsides and the rash fades. About one out of 10 children with measles also gets an ear infection, and up to one out of 20 gets pneumonia (a lung infection). About one out of 1,000 gets encephalitis (swelling of the brain), and one or two out of 1,000 die. Other rash-causing diseases often confused with measles include roseola (roseola infantum) and rubella (German measles).

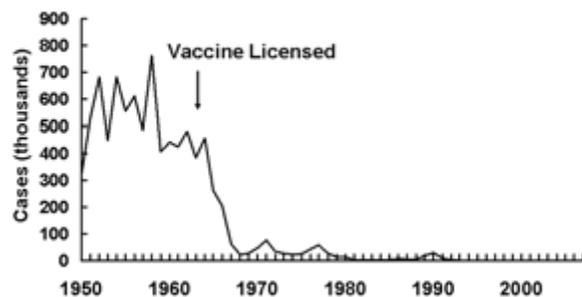
Measles spreads through the air by breathing, coughing or sneezing. It is so contagious that any child who is exposed to it and is not immune will probably get the disease.

Epidemiology

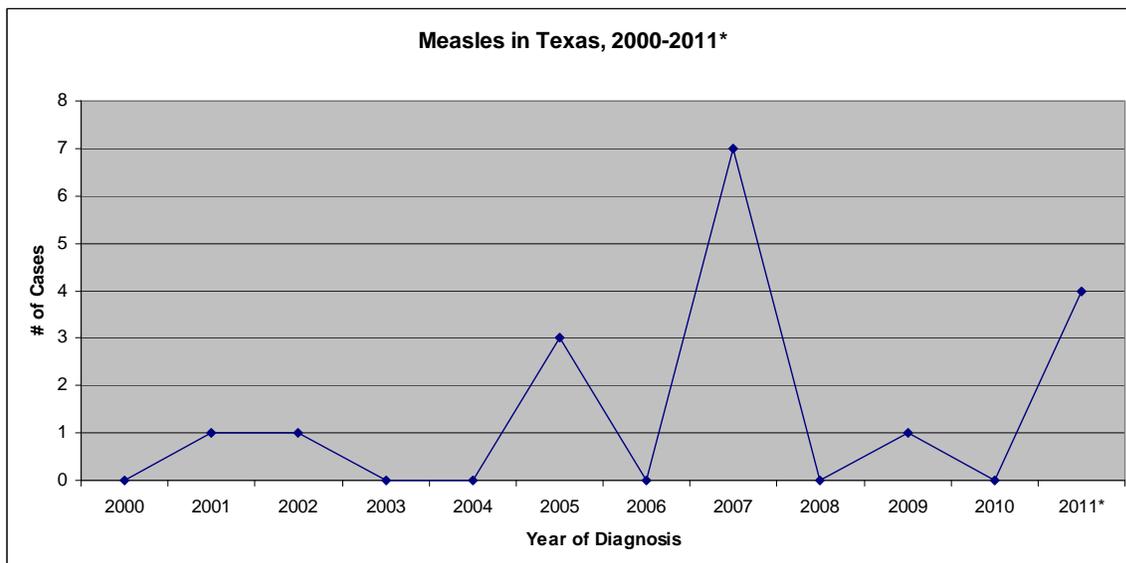
United States

Since 1993, fewer than 500 cases have been reported annually, and fewer than 200 cases per year have been reported since 1997. A record low annual total of 37 cases was reported in 2004. Available epidemiologic and virologic data indicate that measles transmission in the United States has been interrupted. The majority of cases are now imported from other countries or linked to imported cases.

Measles - United States, 1950-2007



Texas



Vaccine Information

The measles vaccine now available in the United States is a live, weakened version of the virus. The vaccine is available combined with mumps and rubella vaccines as MMR, or combined with mumps, rubella, and varicella vaccines as MMRV (ProQuad).

Effectiveness

About 95% of children vaccinated at 12 months of age and 98% of children vaccinated at 15 months of age become immune to measles. Immunity rates are similar for single-antigen measles vaccine, MMR, and MMRV. Approximately 2%–5% of children who receive only one dose of MMR vaccine fail to respond to it. MMR vaccine failure may occur because of passive antibody in the vaccine recipient, damaged vaccine, incorrect records, or possibly other reasons. Most persons who fail to respond to the first dose will respond to a second dose. Studies indicate that more than 99% of people who receive two doses of measles vaccine develop immunity.

Safety

The MMR vaccine is extremely safe. However, there are people who should not get MMR vaccine:

- People who have had a life-threatening allergic reaction to the vaccine or its components in the past
- People who are moderately or severely sick
- Pregnant women

Some people should consult with their medical provider before being vaccinated:

- People who have a weakened immune system due to HIV/AIDS, cancer, treatment with drugs that affect the immune system, or who have ever had a low platelet count
- People who recently received a blood transfusion or other blood products

Like any medicine, vaccines are capable of causing serious problems. The risk of MMR vaccine causing serious harm is extremely small. Side effects include fever (5% - 15%), rash (5%) and temporary joint pain or stiffness (25%). Other side effects are rare and include swelling of the glands, temporary low platelet count and seizure caused by fever.

Vaccination Recommendations

The Advisory Committee on Immunization Practices (ACIP) recommends that MMR be used instead of the individual components. Use of single-antigen measles vaccine is not recommended.

- First dose of MMR at 12-15 months
- Second dose of MMR at 4-6 years
- Second dose may be given any time at least 4 weeks after the first dose
- Adults born in 1957 or later should receive at least one dose of MMR vaccine unless they have documentation of vaccination with at least one dose of measles-, mumps- and rubella-containing vaccine or other acceptable evidence of immunity to these three diseases

References

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2. U.S. Food and Drug Administration. Vaccines Licensed for Immunization and Distribution in the US with Supporting Documents. <<http://www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm093830.htm>>.
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